# **Crew Management System (CMS)**

For Indian Railways, 2<sup>nd</sup> largest rail transporter of the world, CRIS has developed a 24x7 Crew Management System (CMS) application managing its crew for operating trains on the largest rail network. CMS project deals with all categories of train crew who are required to operate all type of train on Indian Railways.

CMS Central Application has been developed & implemented in phases as given below:-

Phase 1 Sanction	Final Phase Sanction
• For 296 lobbies.	For 220 lobbies with Breath analysis and Biometric
	devices
	• For 100 lobbies, 112Training Centres, 68 Divisional
	HQ & 16 Zonal HQ with biometric only
• Pilot on 2007 on 5 Lobbies (at Baroda	• <b>2017-18:</b> Implementation status by Mar 2018
and Ratlam Division)	(Delivered : 410
• <b>2008</b> : Commissioned 148 Lobbies	Received: 405
• <b>2009-10:</b> commissioned 143 Lobbies	Commissioned: 311
• 2010-14: commissioned 69 lobbies thru	with BA: 177
redistribution by Railways	without BA: 134)
• 2014-15: commissioned 25 Lobbies	

### **Objective:**

- 1. Optimum and effective utilization of crew through monitoring of mandatory requirements
- 2. Effective scheduling and assignment of train crew
- 3. Schedule rests (12/16) of the crew based on total duty hours completed.
- 4. Paperless lobby Calls for booking through SMS, Caution Order, Circular, Sign On/OFF
- 5. To generate computerized mileage report for direct submission to P Branch for payments.
- 6. To check driver for drunkenness at time sign on & off duty to ensure safety.

#### **Features:**

- 1. User friendly, 24 X 7, browser based application running on thin clients.
- 2. It has n-tier J2EE architecture using struts frame work supporting open standards
- 3. Seamless integration of sub systems like BA, BIO, Camera with the existing business application.
- 4. Single sign on features.
- 5. Comprehensive data validations during capturing.
  - 6. Industry standards security features.
  - 7. Highly customizable and scalable; reduces deployment time
- 8. Extensive help support 24 X 7
  - 9. User friendly, 24 X 7, browser based application running on thin clients.

## Integration:

- 1. FOIS for freight Train planning, Sign On/Off crew data.
- 2. ICMS for train information.
- 3. COA for issuing caution order for safe operation.
- 4. RBS for new routes and updated distance between stations.
- 5. IPAS for releasing salary through mileage generated by CMS.

#### **Benefits:**

- 1. Efficient Crew utilisation due to inherent transparency
- 2. Operation with Safety being use of Breath Analyser
- 3. Automation through SMS and manpower saving
- 4. Financial Benefits due to no manual interference for mileage calculation.
- 5. Better & Fast planning for crew availability
  - 6. Monitoring of SEC & SFC of electric & diesel locomotives